Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Cancelled) A method comprising:

selecting a packet;

determining a binary number corresponding to ~~the~~ a priority of the selected packet, wherein the binary number comprises N digits;

contending for packet transmission, wherein ~~the~~ a period of contention lasts N slot intervals.

2. (Currently amended) The method of claim ~~1~~ 4 wherein contending for packet transmission comprises:

transmitting a bit for each one of the N digits of the binary number that is non-zero;

sensing a communications medium during a time interval corresponding to each one of the N digits of the binary number that is zero.

3. (Original) The method of claim 2 wherein transmitting a bit comprises transmitting a bit, during one slot interval, for each one of the N digits of the binary number that is non-zero; and wherein sensing the communications medium comprises

sensing the communications medium for one slot interval corresponding to each one of the N digits of the binary number that is zero.

4. (Currently Amended) ~~The method of claim 1~~ A method comprising:

selecting a packet;

determining a binary number corresponding to a priority of the selected packet, wherein the binary number comprises N digits ~~wherein determining the binary number corresponding to the priority of the selected packet comprises determining the binary number corresponding to the priority of the selected packet,~~ and wherein a priority parameter of an MA-UNITDATA.request primitive contains the priority of the selected packet;

contending for packet transmission, wherein a period of contention lasts N slot intervals.

5. (Currently amended) The method of claim ~~1~~ 4 wherein selecting the packet comprises selecting a highest priority packet that is ready to be transmitted.

6. (Currently Amended) The method of claim ~~1~~ 4 wherein the determining the binary number corresponding to the priority of the selected packet comprises determining a two digit binary number.

7. (Currently Amended) The method of claim ~~1~~ 4 wherein the determining the binary number corresponding to the priority of the selected packet comprises determining a three digit binary number.

8. (Previously Presented) The method of claim 6 wherein contending for packet transmission comprises:

A) selecting a most significant digit of the two digit binary number;

B) determining whether a selected digit of the two digit binary number is zero or non-zero;

C) transmitting a bit, during one slot interval, if the selected digit of the binary number is non-zero;

D) sensing a communications medium, during one slot interval, if the selected digit of the binary number is zero;

E) ceasing to contend for packet transmission if another bit is detected while sensing the communications medium;

F) selecting a least significant digit of the binary number if another bit is not detected while sensing the communications medium or if the most significant digit of the binary number is non-zero;

G) repeating processes B through E on the least significant digit if the least significant digit is selected.

9. (Cancelled) An article of manufacture comprising:

a machine accessible medium providing machine readable instructions that, when executed by a machine, cause the machine to:

select a packet;

determine a binary number corresponding to a priority of the selected packet, wherein the binary number comprises N digits;

contend for packet transmission, wherein a period of contention lasts N slot intervals.

10. (Currently amended) The article of manufacture of claim ~~9~~ 12, wherein the machine readable instructions, that when executed by a machine, cause the machine to contend for packet transmission comprises machine readable instructions, that when executed, cause the machine to:

transmit a bit for each one of the N digits of the binary number that is non-zero;

sense a communications medium during a time interval corresponding to each one of the N digits of the binary number that is zero.

11. (Original) The article of manufacture of claim 10, wherein the machine readable instructions, that when executed by a machine, cause the machine to contend for packet

transmission comprises machine accessible medium providing content that, when accessed by the machine, cause the machine to:

transmit a bit, during one slot interval, for each one of the N digits of the binary number that is non-zero;

sense the communications medium for one slot interval corresponding to each one of the N digits of the binary number that is zero.

12. (Currently Amended) ~~The article of manufacture of claim 9, wherein the machine readable instructions, that when executed by a machine, cause the machine to determine the binary number comprises machine readable instructions, that when executed, cause the machine to:~~ An article of manufacture comprising:

a machine accessible medium providing machine readable instructions that, when executed by a machine, cause the machine to:

select a packet;

determine a binary number corresponding to a priority of the selected packet, ~~determine the binary number corresponding to the priority of the selected packet,~~ wherein a priority parameter of an MA-UNITDATA.request primitive contains the priority of the selected packet

wherein the binary number comprises N digits;

contend for packet transmission, wherein a period of contention lasts N slot intervals.

13. (Currently amended) The article of manufacture of claim ~~9~~ 12, wherein the machine readable instructions, that when executed by a machine, cause the machine to determine the binary number comprises machine readable instructions, that when executed, cause the machine to:

determine the binary number corresponding to the priority of the selected packet, wherein the binary number comprises two digits.

14. (Original) The article of manufacture of claim 13, wherein the machine readable instructions, that when executed by a machine, cause the machine to contend for packet transmission comprises machine readable instructions, that when executed, cause the machine to:

A) select a most significant digit of the two digit binary number;

B) determine whether the selected digit of the binary number is zero or non-zero;

C) transmit a bit, during one slot interval, if the selected digit of the binary number is non-zero;

D) sense the communications medium, during one slot interval, if the selected digit of the binary number is zero;

E) cease to contend for packet transmission if another bit is detected while sensing the communications medium;

F) select a least significant digit of the binary number if another bit is not detected while sensing the communications medium or if the most significant digit of the binary number is non-zero;

G) perform steps B through E on the least significant digit if the least significant digit is selected.

15. (Currently amended) The method of claim ~~1~~ 4 wherein contending for packet transmission comprises:

A) selecting a most significant digit of the binary number;

B) determining whether a selected digit of the binary number is zero or non-zero;

C) transmitting a bit, during one slot interval, if the selected digit of the binary number is non-zero;

D) sensing the communications medium, during one slot interval, if the selected digit of the binary number is zero;

E) ceasing to contend for packet transmission if another bit is detected while sensing the communications medium;

F) selecting a next most significant digit of the binary number if another bit is not detected while sensing the communications medium or if the selected digit of the binary number is non-zero;

G) repeating processes B through F for each digit of the binary number.

16. (Currently Amended) The article of manufacture of claim ~~9~~ 12, wherein the machine readable instructions, that when executed by a machine, cause the machine to contend for packet transmission comprises machine readable instructions, that when executed, cause the machine to:

A) select a most significant digit of the binary number;

B) determine whether the selected digit of the binary number is zero or non-zero;

C) transmit a bit, during one slot interval, if the selected digit of the binary number is non-zero;

D) sense the communications medium, during one slot interval, if the selected digit of the binary number is zero;

E) cease to contend for packet transmission if another bit is detected while sensing the communications medium;

F) select a next most significant digit of the binary number if another bit is not detected while sensing the communications medium or if the selected digit of the binary number is non-zero;

G) repeat processes B through F for each digit of the binary number.

17. (Original) A method comprising:

a first station selecting a packet;

the first station determining a binary number corresponding to a priority of the selected packet, wherein the binary number comprises N digits;

the first station transmitting the binary number over a communications medium;

the first station sensing the communications medium to determine whether another station is transmitting another binary number.

18. (Original) The method of claim 17 wherein the first station transmits a bit for each digit of the binary number that is non-zero and senses the communications medium for each digit of the binary number that is zero.

19. (Original) The method of claim 18 wherein the binary number comprises two digits.

20. (Original) The method of claim 18 wherein the binary number comprises three digits.